

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claims 1- 5. Cancelled.

6 (Currently Amended). ~~The method of claim 2,~~ A method of delivering a heterologous nucleic acid to at least one muscle cell in a mammalian subject, comprising:

(a) providing at least one recombinant adeno-associated virus (rAAV) virion, said rAAV virion comprising an AAV-6 capsid and a heterologous nucleic acid molecule comprising a nucleic acid sequence encoding wherein said protein is alpha1-antitrypsin operably linked to expression control elements; and

(b) administering said rAAV virions to said muscle cell, whereby expression of said alpha alpha1-antitrypsin provides for a therapeutic effect or erythropoietin.

7 (Currently Amended). The method of claim 6 ~~1~~, wherein said administering of said rAAV virions is by way of direct injection to said muscle cell of said mammalian subject.

8 (Original). The method of claim 7, wherein said muscle cell is a skeletal muscle cell.

Appln No. 10/696,261  
Office Action dated December 7, 2005  
Response June 5, 2006

9 (Currently Amended). The method of claim 6 ~~4~~, wherein said administering of said rAAV virions is by way of administration to a vascular conduit of said mammalian subject.

10 (Original). The method of claim 9, wherein said vascular conduit is a vein.

11 (New). The method of claim 9, wherein the nucleic acid molecule comprises two AAV2 inverted terminal repeats (ITRs).

12 (New). The method of claim 9, wherein the AAV-6 capsid has an amino acid sequence of SEQ ID NO:13, with one or more a Phe at position 129 of SEQ ID NO: 13; an Asp at position 419 of SEQ ID NO:13; a Lys at position 531, a Leu at position 584, a Val at position 598, and a His at position 642.

13 (New). The method of claim 9, wherein the AAV-6 capsid is encoded by the nucleotide sequence of SEQ ID NO:19.